

## Mollusc and Crustacean Culture (I002791)

**Cursusomvang** (nominale waarden; effectieve waarden kunnen verschillen per opleiding)

**Studiepunten 5.0**                      **Studietijd 150 u**

**Aanbodsessies in academiejaar 2024-2025**

**Lesgevers in academiejaar 2024-2025**

**Aangeboden in onderstaande opleidingen in 2024-2025**                      **stptn**                      **aanbodsessie**

### Onderwijstalen

Engels

### Trefwoorden

Culture techniques, biology of shellfish, abalone, oyster, mussel, scallop, clam, penaeids, prawn, lobster, crayfish, crab.

### Situering

The aim of this course is to teach culture techniques that are commonly applied for the commercial production of crustaceans and molluscs.

The course offers detailed knowledge on various mollusc and crustacean species.

Practical classes on mollusc anatomy and freshwater shrimp development are included.

### Inhoud

Crustacean culture

1. General aspects on the production of crustaceans : maturation, reproduction, larval culture, grow-out, feeds
2. Production techniques for penaeid shrimp
3. Production techniques for freshwater prawn *Macrobrachium*
4. Production techniques for lobster
5. Practicum identification different larval stages of *Macrobrachium*

Mollusc culture

1. World production of molluscs
2. Abalone culture
3. Anatomy of bivalves with practicum dissection
4. General aspects on the production of bivalves : life cycle, nutritional requirements in different life stages and environmental adaptations of bivalves
5. Exceptional species
6. Common hatchery and nursery systems for bivalves
7. Common grow-out systems for bivalves
8. Impact of bivalve culture on the environment
9. Diseases in cultured molluscs

### Begincompetenties

General biology, chemistry, biochemistry and basic knowledge on aquaculture.

### Eindcompetenties

- 1 The student has knowledge on the biological requirements of crustaceans and molluscs in commercial production systems.
- 2 The student has technical knowledge on the rearing systems used for

crustaceans and molluscs.

- 3 The student has insight into how to start a hatchery or grow-out farm for crustaceans.
- 4 The student is able to identify mollusc organs.
- 5 The student is able to identify different larval stages of freshwater prawn.

#### **Creditcontractvoorwaarde**

Toelating tot dit opleidingsonderdeel via creditcontract is mogelijk na gunstige beoordeling van de competenties

#### **Examencontractvoorwaarde**

Dit opleidingsonderdeel kan niet via examencontract gevolgd worden

#### **Didactische werkvormen**

Werkcollege, Hoorcollege, Practicum, Zelfstandig werk

#### **Toelichtingen bij de didactische werkvormen**

Theory lectures: lectures based on powerpoint presentations and videos.

Practical classes: dissection of bivalves and identification of different larval stadia of *Macrobrachium*.

Exercises: exercise on the starting-up and exploitation of a shrimp hatchery.

#### **Studiemateriaal**

Geen

#### **Referenties**

Hatchery culture of bivalves, by Michael Helm, FAO Technical paper 471

Farming freshwater prawns, by Michel New, FAO Technical paper 428

Crustacean farming, by John Wickins and Daniel O.C.Lee

#### **Vakinhoudelijke studiebegeleiding**

Study guidance upon request by email or on appointment.

#### **Evaluatiemomenten**

periodegebonden en niet-periodegebonden evaluatie

#### **Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode**

Schriftelijke evaluatie

#### **Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode**

Schriftelijke evaluatie

#### **Evaluatievormen bij niet-periodegebonden evaluatie**

Participatie

#### **Tweede examenkans in geval van niet-periodegebonden evaluatie**

Examen in de tweede examenperiode is niet mogelijk

#### **Toelichtingen bij de evaluatievormen**

Period aligned evaluation: theory: written closed book exam.

Non-period aligned evaluation: practical classes and exercises: participation.

#### **Eindscoreberekening**

Out of 20:

14 points attributed to exam mollusc part

6 point attributed to exam crustacean part

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.

Students that do not attend the practical classes without a valid reason should retake the course the next academic year.